

Table of Contents

Preface

vii

I FUNDAMENTALS

1	Introduction to Communication Technologies, <i>August E. Grant, Ph.D.</i>	1
2	Historical Perspectives on Communication Technology, <i>Dan Brown, Ph.D.</i>	9
3	Understanding Communication Technologies, <i>Jennifer H. Meadows, Ph.D.</i>	47
4	The Structure of the Communication Industries, <i>August E. Grant, Ph.D.</i>	57
5	Communication Policy & Technology, <i>Lon Berquist, M.A.</i>	71

II ELECTRONIC MASS MEDIA 81

6	Digital Television & Video, <i>Peter B. Seel, Ph.D. & Michel Dupagne, Ph.D.</i>	82
7	Multichannel Television Services, <i>Jennifer H. Meadows, Ph.D.</i>	101
8	IPTV: Streaming Media, <i>Jeffrey S. Wilkinson, Ph.D.</i>	117
9	Interactive Television, <i>Cheryl D. Harris, Ph.D.</i>	132
10	Radio Broadcasting, <i>Gregory Pitts, Ph.D.</i>	144
11	Digital Signage, <i>Janet Kolodzy, M.S.J.</i>	157
12	Cinema Technologies, <i>Jillian Neal, Stephanie Warren, & Natasha Whitting</i>	168

III COMPUTERS & CONSUMER ELECTRONICS 183

13	Personal Computers, <i>Chris Roberts, Ph.D.</i>	184
14	Video Games, <i>Brant Guillory, M.M.C.</i>	202
15	Home Video, <i>Steven J. Dick, Ph.D.</i>	214
16	Digital Audio, <i>Ted Carlin, Ph.D.</i>	229
17	Digital Imaging & Photography, <i>Michael Scott Sheerin, M.S.</i>	249

IV NETWORKING TECHNOLOGIES 263

18	Telephony, <i>Jack Karlis, M.A.M.C. & Matthew Telleen, J.D.</i>	264
19	The Internet, <i>Tim Brown, Ph.D. & Heather Halter, B.A.</i>	281
20	Social Networking, <i>Rachel A. Saucerbier</i>	292
21	Broadband & Home Networks, <i>John J. Lombardi, Ph.D. with Jennifer H. Meadows, Ph.D.</i>	305
22	Telepresence, <i>Michael R. Ogden, Ph.D. & Steve Jackson, M.A.</i>	322

V CONCLUSIONS

23	Conclusions...& the Future, <i>August E. Grant, Ph.D.</i>	342
----	---	-----

Glossary and Updates can be found on the
Communication Technology Update and Fundamentals Home Page
<http://www.tfi.com/ctu/>